CLAIMS

What is claimed is:

1.   A wireless pulse oximeter, comprising:

a wireless sensor input for receiving raw pulse oximetry data;

a processor in communication with the wireless sensor configured for processing the raw pulse oximetry data to obtain processed pulse oximetry data and further configured to generate a Web page for displaying the processed pulse oximetry data; and

a wireless transceiver in communication with the processor and configured for communicating oximetry information including any of the raw pulse oximetry data, the processed pulse oximetry data and the Web page.

2.   The wireless pulse oximeter according to claim 1, wherein the wireless sensor input is further configured to receive signals representative of at least one of electrocardiogram (EKG) and temperature.

3.   The wireless pulse oximeter according to claim 1, further comprising a wireless patient sensor configured for measuring the raw pulse oximetry data and transmitting the raw pulse oximetry data to the wireless sensor input.

4.   The wireless pulse oximeter according to claim 3, wherein the wireless patient sensor further comprises:

red and infrared (IR) light sources configured for transmitting red and IR light into patient tissue;

a light sensor configured to receive attenuated transmitted or reflected light from the patient tissue and generate the raw pulse oximetry data; and

a transmitter for transmitting the raw pulse oximetry data to the wireless sensor input.

5.   The wireless pulse oximeter according to claim 4, wherein the transmitter incorporates at least one of the following wireless standards, protocols or technologies: Institute of Electrical and Electronics Engineers (IEEE) 802.11a, IEEE 802.11b, IEEE 802.11g, Federal Communication Commission (FCC) Wireless Medical Telemetry Band (WMTS), infrared (IR), radio frequency (RF) transmission and Bluetooth®.

6. The wireless pulse oximeter according to claim 1, further comprising a display configured for displaying parameters including at least one of pulsatile blood oxygen concentration (SpO_2), heart rate, battery strength, wireless LAN signal strength, patient sensor signal strength, alarms and user settings.

7. The wireless pulse oximeter according to claim 6, wherein the display is further configured to display the parameters in the Web page.

8. The wireless pulse oximeter according to claim 1, further comprising a wireless access point for receiving information from the wireless transceiver and providing access to the oximetry information on a network.

9. A standalone wireless pulse oximeter, comprising:
a wireless patient sensor configured for measuring and wirelessly transmitting raw pulse oximetry data from a patient;
a wireless sensor input for receiving the raw pulse oximetry data; and
a processor connected to the wireless sensor and configured for processing the raw pulse oximetry data to obtain processed pulse oximetry data and further configured to format the processed pulse oximetry data in a Web page.

10. The standalone wireless pulse oximeter according to claim 9, further comprising a display in communication with the processor for displaying the Web page.

11. The standalone wireless pulse oximeter according to claim 9, wherein the wireless patient sensor wirelessly transmits the raw pulse oximetry data using at least one of Bluetooth, infrared, radio frequency, and IEEE 802.11 wireless transmission standards.

12. The standalone wireless pulse oximeter according to claim 9, wherein the Web page comprises hypertext markup language (HTML).

13. A patient monitoring system, comprising:
a wireless patient sensor configured for measuring and transmitting raw pulse oximetry data from a patient;
a wireless pulse oximeter configured to receive the raw pulse oximetry data from the wireless patient sensor and configured to transmit the raw pulse oximetry data and

configured to process and transmit the raw pulse oximetry data as processed pulse oximetry data and configured to format and transmit the processed pulse oximetry data for viewing as a Web page, tables or graphics;

a wireless access point configured for receiving and providing access to the raw pulse oximetry data, the processed pulse oximetry data or the Web page, tables or graphics on a network; and

a remote monitoring station in communication with the network configured for receiving the raw pulse oximetry data, the processed pulse oximetry data or the Web page, tables or graphics.

14.   The patient monitoring system according to claim 13, wherein the wireless pulse oximeter comprises:

a wireless sensor input configured for receiving the raw pulse oximetry data from the wireless patient sensor;

a processor in communication with the wireless sensor input and configured to process the raw pulse oximetry data as processed pulse oximetry data and configured to format the processed pulse oximetry data for viewing as a Web page, tables or graphics; and

a wireless transceiver in communication with the processor and configured for wirelessly transmitting the raw pulse oximetry data, the processed pulse oximetry data, the Web page, tables or graphics.

15.   The patient monitoring system according to claim 13, wherein the remote computer is further configured to process the raw pulse oximetry data and further configured to format and display the processed pulse oximetry data for viewing as a Web page.

16.   A method for wirelessly transmitting pulse oximetry data, comprising:

receiving raw pulse oximetry data from a patient;

transmitting the raw pulse oximetry data for processing;

processing the raw pulse oximetry data to obtain processed pulse oximetry data;

formatting the processed pulse oximetry data for display as a Web page; and

continuously updating the Web page dynamically and in real-time as the raw pulse oximetry data continues to be received.

17. The method according to claim 16, further comprising serving the Web page on a network to allow remote patient monitoring.

18. The method according to claim 16, further comprising displaying the Web page, tables or graphics.

19. The method according to claim 16, further comprising monitoring the patient based on the Web page, tables or graphics.

20. A wireless pulse oximeter, comprising:
a means for wirelessly receiving raw pulse oximetry data;
a means for processing the raw pulse oximetry data to obtain processed pulse oximetry
        data; and
a means for formatting the processed pulse oximetry data as a Web page.

21. The wireless pulse oximeter according to claim 20, further comprising a means for displaying the Web page.

22. The wireless pulse oximeter according to claim 20, further comprising a means for serving the Web page on a network.

23. The wireless pulse oximeter according to claim 20, wherein the means for processing the raw pulse oximetry data comprises an oximetry module.

24. The wireless pulse oximeter according to claim 20, wherein the means for formatting the processed pulse oximetry data comprises at least one of server-side includes (SSI), Javascript, Common Gateway Interface (CGI), Active Server Pages (ASP), PHP: Hypertext Preprocessor (PHP) and Extensible Markup Language (XML).

25. A computer media for storing a computer program, the computer program implementing a method of wirelessly transmitting pulse oximetry data, the method comprising:
receiving raw pulse oximetry data from a patient;
transmitting the raw pulse oximetry data for processing;
processing the raw pulse oximetry data to obtain processed pulse oximetry data;

formatting the processed pulse oximetry data for display as a Web page; and continuously updating the Web page dynamically and in real-time as the raw pulse oximetry data continues to be received.